

Miniaturized Digital EVA Radio, Phase I

Completed Technology Project (2010 - 2010)



Project Introduction

Bennett Aerospace and Team Partners propose to develop a small, lightweight, and very power-efficient mobile radio for use on the Lunar surface. Our Team will achieve a design that meets NASA size and mass requirements while reducing power consumption by more than 90%. We will accomplish this through innovative approaches in power management and RF front end design.

Primary U.S. Work Locations and Key Partners

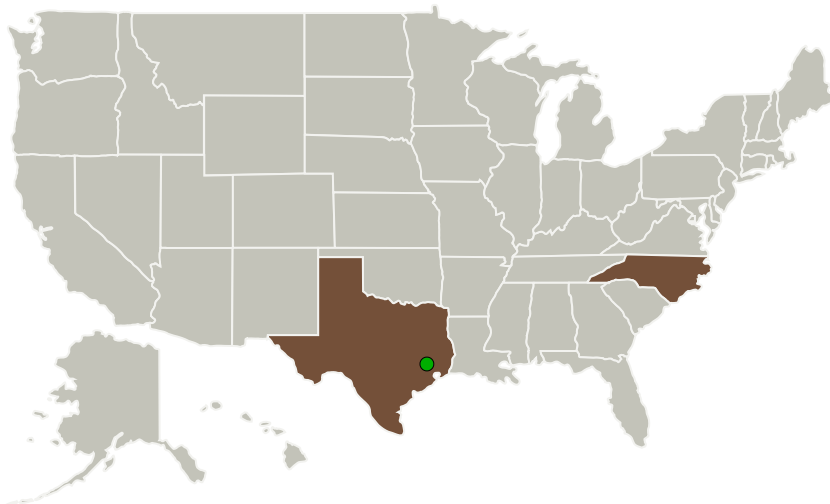
Miniaturized Digital EVA Radio,
Phase I

Table of Contents

Project Introduction	1
Primary U.S. Work Locations and Key Partners	1
Project Transitions	2
Organizational Responsibility	2
Project Management	2
Technology Maturity (TRL)	2
Technology Areas	3
Target Destinations	3

Organizations Performing Work	Role	Type	Location
Bennett Aerospace, LLC	Lead Organization	Industry Small Disadvantaged Business (SDB), Women- Owned Small Business (WOSB), Veteran-Owned Small Business (VOSB), Minority-Owned Business	Cary, North Carolina
● Johnson Space Center(JSC)	Supporting Organization	NASA Center	Houston, Texas

Miniaturized Digital EVA Radio, Phase I

Completed Technology Project (2010 - 2010)





Primary U.S. Work Locations

North Carolina

Texas

Project Transitions

 **January 2010:** Project Start

 **July 2010:** Closed out

Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/139237>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

Bennett Aerospace, LLC

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

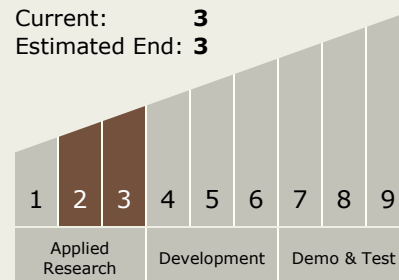
Carlos Torrez

Principal Investigator:

Douglas H Bennett

Technology Maturity (TRL)

Start: 2
Current: 3
Estimated End: 3



Miniaturized Digital EVA Radio, Phase I

Completed Technology Project (2010 - 2010)



Technology Areas

Primary:

- TX05 Communications, Navigation, and Orbital Debris Tracking and Characterization Systems
 - └ TX05.2 Radio Frequency
 - └ TX05.2.1 Spectrum-Efficiency

Target Destinations

The Moon, Mars, Outside the Solar System, The Sun, Earth, Others Inside the Solar System